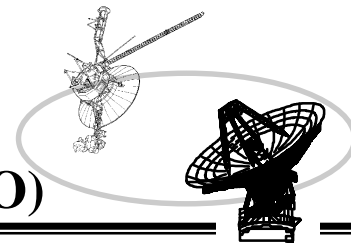


Resource Allocation Planning & Scheduling Office (RAPSO)

INTEGRAL Forecasted DSN Support

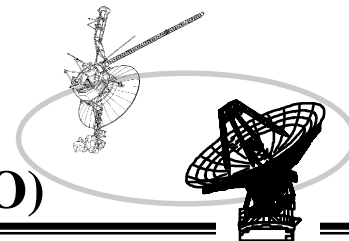
Gene Burke

October 10, 2000



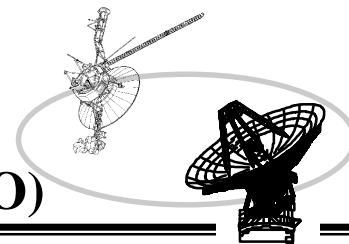
INTEGRAL Mission Support

- **Mission Parameters**
 - Launch: 22 April 2002 from Baikonur, Kazakstan
 - Highly Elliptical Orbit ~72 Hour Orbital Period
 - Full Ground Station Coverage Above 40,000 km
 - 5 Year Design Life
 - 2 Month Launch, Early Orbit and Commissioning Phase
 - 2 Year Prime Mission
 - 3 Year Extended Mission



INTEGRAL Mission Support

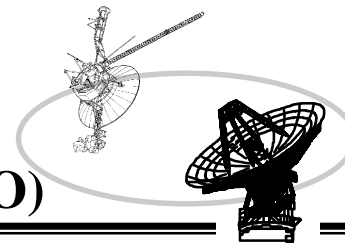
- **DSN Tracking Requirements**
 - Requested to Provide Supplemental Coverage
 - Up to 16 Hours Per 72-hour Orbit for Mission Duration
 - Requested Support Only from Goldstone Complex
 - DSS 16 Primary Support (26 meter antenna)
 - DSS 24 and 27 Backup Services (34 meter antennas)
 - References:
 - Preliminary PSLA (15 December 1999)
 - CReMA Issue 5 (August 2000)
 - View Period File: 25 October 2001 Launch (72-hour Orbit)



INTEGRAL Mission Support

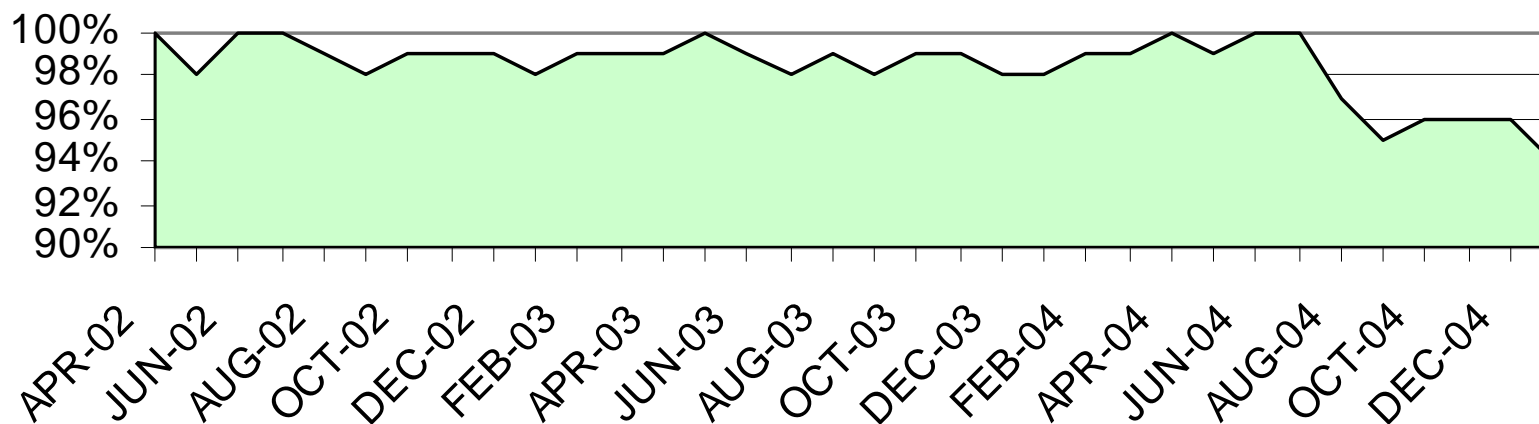
- **DSN Loading Study 2002-2005:**
 - Generally greater than 90% supportable time
 - Periods of contention are during SOHO high support periods and TDRS or GOES Launches
 - Agreed to use some DSS-24 during weeks of high SOHO contention in October - December 2002. (January 2000)
 - SOHO End of Mission December 30, 2005
 - Current Launch Plans for TDRS and GOES:

TDRS-I	December 01, 2002
GOES-N	October 01, 2002
TDRS-J	July 01, 2003
NOAA-N	December 03, 2003
GOES-O	April 01, 2004

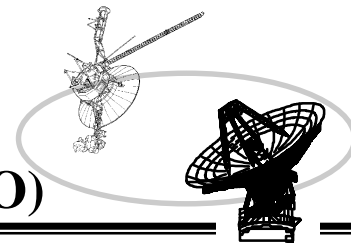


Resource Allocation Planning & Scheduling Office (RAPSO)

INTEGRAL Forecasted Monthly Supportable Percentage



Months: 2002 - 2005



Resource Allocation Planning & Scheduling Office (RAPSO)

INTEGRAL Mission Support

- **Comments/Questions/Requests**
 - Conditions of Use for DSS-27 and 24?
 - Any Tracking, Telemetry and Command Restrictions?
 - Are There Restrictions for Coverage Overlap?
 - Current View Period Ends January (Week 4) in 2005